

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SUBJECT	VEB Elektrochemisches Kombinat Bitterfeld 1952 and 1953 Research Programs	DATE DISTR.	14 August 1953	
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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
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(FOR KEY SEE REVERSE)

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1. 1953 Research program

The 1953 research program has been approved and passed to the works. It encompasses a total of 52 assignments:

	<u>Assignment</u> ²	<u>Allocation</u> (thousands of Marks.)	
1.	Sodium chlorite	70	
2.	Cerium oxide	80	
3.	Titanium metal	100	
4.	Iron powder	120	
5.	Iron alloys by aluminothermic process	70	
6.	Welding electrodes	60	
7.	Aluminum-magnesium alloys	180	
8.	Lead-bearing metals	50	
9.	High-duty cast iron	90	
10.	Biological testing	30	
11.	Fluorine polymers	120	25X1
12.	PVC-perpolymers	150	
13.	PVC-pressure chlorination	60	
14.	PC stock solutions	50	
15.	Mixed polymers	70	
16.	Dicarboxylic esters (plasticizers)	60	
17.	Stabilizers	40	
18.	Tar utilization (Teerverwertung)	100	
19.	Perchloroethylene	50	
20.	Pentachlorophenol	50	
21.	Trichlorostyrene	60	
22.	Polarographic development work	13	

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25 YEAR RE-REVIEW

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	<u>Assignment</u>	<u>Allocation</u> (thousands of Marks)	
23.	Oxidation contact catalysts	72	
24.	Influence of impurities on the chemical polishing of light metals	16	
25.	Soil pests	25	
26.	Weed killers	25	
27.	Gamma - estimation	15	
28.	Atomizer (Verneblungsgeraet)	15	
29.	Alumina from clay:)	
	a. Combined process)	
	b. Specketer process) 1,260	
	c. Laboratory)	
	d. Investigation of raw materials)	
30.	Anhydrous $MgCl_2$	120	25X1
31.	Fluorine	100	
32.	Tantalum	60	
33.	Spinning laver process	100	
34.	Metal stabilizers	15	
35.	PVC flame jets (PVC-Flammspritzen)	60	
36.	High frequency and infra-red	50	
37.	Methyl ohloride pressure distillation	50	
38.	Carbon tetrachloride	40	
39.	Triethylhexyl phosphate	100	
40.	Pure hexa	50	
41.	Benzene losses	50	
42.	Enamels	40	
43.	Active silicio acid	35	
44.	Titanium dioxide	60	
45.	Acid putty (Saeurekitt)	20	
46.	Rivet alloys (Nietlegierungen)	24	
47.	Aluminum leads (Leitaluminium)	24	
48.	Reagent atomizing (Wirkstoffverneblung)	30	
49.	Exchange of nonferrous metals (PVC)	60	
50.	Igurit	60	
51.	Continuous chlorate production	60	
52.	Winning of "Hexa" (Hexa-Ausbeute)	50	
	Total:	4,359	

2. 1952 Program

For comparison, the 1952 research program was as follows:

	<u>Assignment</u>	<u>Allocation</u> (thousands of Marks)	
1.	Production of alumina from clay	1,050	
2.	Titanium dioxide	78	
3.	Sodium chlorite	60	
4.	Annydrous $MgCl_2$	68	
5.	Electrolytic fluorine	60	
6.	Potassium ferrichromate	24	
7.	Anhydrous sodium metasilicate	12	

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AssignmentAllocation
(thousands of
Marks)

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8.	Co-Al catalyst for oxidation of NH ₃	132
9.	Freons	30
10.	New kinds of acid resistant putties	30
31.	Methylene chloride	50
32.	Fluorine containing plastics	72
33.	Igelit plasticizers	52
34.	Production of partly-fabricated articles for testing plasticizers	60
35.	Hard montan wax	18
36.	Porous Igelit	18
37.	High-polymer PVC	120
38.	New polymerization process for low PVC polymers	138
39.	New process for polymerization of asymmetric dichlorethylene	??
40.	High-frequency welding of Igelit	55
41.	Improvement of production of hexachlorocyclohexane	115
42.	Testing of pest-extermimators	84
51.	New aluminum alloys	120
52.	Improvement of aluminum alloys	35
53.	New recipe for welding electrodes	30
55.	Tantalum metal	54
56.	Heat treatment of high remanence magnet alloys	30
57.	Iron powder	30
58.	Cerium free "spark" metal	18
60.	Distillation and rectification columns	50
61.	Improvement of Igitrit	48
62.	Development of Hooker Cell	120
65.	Improvement of graphite electrodes	40
66.	Polarographic investigations	12
67.	Development of caustic purifying process (from NaCl) by NH ₃ process	150
68.	Chemically pure H ₂ TeO ₄ and H ₂ SeO ₄	20
69.	Plant for 1/2% potassium hypochlorite	36
70.	Chlorination kiln for various materials	90
71.	Acid-resistant paints	24
72.	Spark-free, acid, solvent, and caustic-resistant flooring material	20
--	Lead-bearing metals	48
--	Hyposulphite and amalgam reduction	72
--	Vinyl chloride without acetylene	150
--	Oxalic acid without sugar or cellulose	48
--	Stabilizers for Vinidur cable covering	48

3. Production achieved in 1952 and planned for 1953:

The following figures show the production actually achieved by the works in 1952, wherever they are known. The planned production figures for 1953 are also shown.

<u>Product</u>	<u>Quantity</u>	<u>Total-t</u> <u>Sold=t</u>	<u>Actual-1952</u>	<u>Planned-1953</u>	25X1
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Inorganic Department:

Caustic soda lye; III	tons	t	14,680	14,000	25X1
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<u>Product</u>	<u>Quantity</u>	<u>Total=t</u> <u>Sold=s</u>	<u>Actual-1952</u>	<u>Planned-1953</u>
Caustic soda lye; I	NaOH	t	4,143	5,300
		s	14,080	14,433
Caustic potash lye	T. KOH	t	26,660	24,200
		s	6,425	2,200
Solid KOH tech.	tons	t	5,102	5,600
		s	5,094	5,588
Chlorine gaseous; I	tons	t		19,410
III		t		12,050
		s		-
Chlorine liquid	tons	t	8,995	8,750
		s	6,540	5,750
Hydrogen uncomp. cl. I	m ³ x10 ³	t		6,020
cl. III		t		3,650
chlorate		t		8,980
		s		-
Hydrogen chloride	tons	t	23,979	28,000
		s	12,572	17,000
K and Na chlorate	tons	t	17,774	18,600
		s	17,639	18,380
Agrosan	tons	t=s		160
Wegerein	tons	t=s		300
Anforstan	tons	t=s		150
Potassium dichromate	tons	t	4,800	5,000
		s	3,132	2,730
Chromic acid	tons	t=s	466	560
Basochrom	tons	t=s	1,144	1,080
Chrome alum	tons	t=s	28	300
Chromic oxide	tons	t	26	250
		s	22	250
Barium potassium chromate	tons	t=s		100
Potash (calc.) K ₂ CO ₃	tons	t	10,215	12,000
		s	10,007	11,800
Graphite electrodes for chemical industry	tons	t	2,600	3,800
		s	1,274	1,400
Graphite electrodes for metallurgy	tons	t=s	10,160	10,700
Phosphorus, raw yellow	tons	t	1,321	1,480

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<u>Product</u>	<u>Quantity</u>	<u>Total=t</u> <u>Sold=s</u>	<u>Actual-1952</u>	<u>Planned-1953</u>
Phosphorus, yellow pure	tons	t s	1,281 735	1,465 635
Phosphorus, red	tons	t=s	22	120
Ferrophosphorus	tons	t=s	131	180
Barium chloride	tons	t s	1,428 1,179	1,200 960
Titanium dioxide	tons	t s	1,188 1,009	2,000 1,800
Potassium permanganate	tons	t s	2,127 2,113	2,400 2,400
Acid fast putty	tons	t s	1,897 1,787	1,350 1,350
Oxygen	m ³ x10 ³	t s	1,359 297	1,320 630
Nitrogen comp.	m ³ x10 ³	t s	186 178	150 150
Compressed air	m ³ x10 ³	t s	27 15	30 30
Generator tar	tons	t s	2,255 2,225	2,000 1,988
Generator tar-oil	tons	t s	667 619	520 520
Quicklime	tons	t s	4,055 270	4,000 -
Boric acid cryst.	tons	t s		42 30
Barium chlorate	tons	t=s	1	
Boron carbide	Kilos	t s	455 340	
Chlorine to Wolfen	tons	t=s	997	
Ferric chloride	tons	t=s	289	
Elrasal	tons	t s	477 402	
Gas-purifying compound	tons	t=s	42	
Graphitized anthracite	tons	t	170	
Graphite powder	tons	t s	274 238	
Worked graphite	tons	t=s	0.7	

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<u>Product</u>	<u>Quantity</u>	<u>Total=t</u> <u>Sold=s</u>	<u>Actual-1952</u>	<u>Planned-1953</u>
Graphite waste	tons	t=s	197	
Igurit heat exchangers	items	t s	162 159	
Potassium perchlorate	tons	t=s	2	
Colloidal graphite	tons	t s	5.8 5.3	
Manganese carbonate	tons	t s	12 5	
Manganese chloride (aq.)	tons	t=s	12	
Manganese chloride (anh.)	tons	t=s	24	
Manganite	tons	t=s	114	
Manganese mud	tons	t=s	366	
Sodium metal	tons	t s	19.8 19.7	
Sodium perchlorate	tons	t=s	19	
Phosokresol (tricresyl phosphate?)	tons	t=s	1	
Phosphorus kiln dust	tons	t=s	109	
Potash lye	tons	t=s	4	
Tisil	tons	t=s	162	
Thawing compound	tons	t=s	14	
Potassium sulphate	tons	t s	16 9	

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Nitrogen Department

Crude nitric acid (nitrogen)	tons	t t	94,748 21,055	96,280 21,395
Calcium ammonium nitrate (nitrogen)	tons	t t s		177,700 36,430 36,430
Ammonium nitrate tech. (nitrogen)	tons	t t s		14,630 5,120 5,120
Sodium nitrite/nitrate lye (sic) (nitrogen)	tons	t=s	2,264	2,400

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Organic Department

Chlorobenzene	tons	t s	4,105 1,459	4,200 970
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<u>Product</u>	<u>Quantity</u>	<u>Total=t</u> <u>Sold=s</u>	<u>Actual-1952</u>	<u>Planned-1953</u>
o-Dichlorobenzene	tons	t=s	231	250
p-Dichlorobenzene	tons	t=s	386	500
Lighter fuel	1,000 bts.	t=s	608	480
Phosphorus trichloride crude	tons	t	2,364	3,035
PCl ₃ pure	tons	t s	178 160	150 135
Phosphorus oxychloride	tons	t s	2,343 13	3,200 -
Benzotrichloride crude	tons	t	537	405
Benzyl and benzal chlorides	tons	t=s	159	160
Gesarol	tons	t s	2,886 2,857	3,600 3,548
Tricresyl phosphate	tons	t s	3,951 2,489	6,000 4,314
Triphenyl phosphate	tons	t s	135 86	240 240
Benzoic acid	tons	t=s	218	180
Carbon tetrachloride	tons	t s	5,262 5,033	4,800 4,800
Sulphur in lumps	tons	t=s	2,224	1,920
Chloral	tons	t s	2,068 606	2,300 500
HCC active material	tons	t		25
Duplexan	}	tons t s	730 729	2,000
Hexitol				20
Duplexol				10
Duplinan				10
Aerosol				3
Oxalic acid cryst.	tons	t s	1,955 1,910	2,100 2,040
Calcium formate	tons	t s	1,738 41	1,800 -
Kofa-salt	tons	t=s	372	450
Formic acid	tons	t s	731 684	840 840

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<u>Product</u>	<u>Quantity</u>	<u>Total=t</u> <u>Sold=s</u>	<u>Actual-1952</u>	<u>Planned-1953</u>
Methylene chloride	tons	t s	32 23	600 570
Pentachlorophenol	tons	t=s		45
Hydrochloric acid	tons	t s	5,175 5,502	7,000 4,800
Benzene reclaimed	tons	t=s	19	
Chloralhydrate	tons	t=s	10	
Chloroform tech.	tons	t=s	14	
Sulphur chloride	tons	t=s	8	
Etingal	tons	t=s	2	
Phosphorus pentachloride	tons	t=s	8	
Plasticizer KP	tons	t=s	198	
Benzene hexachloride	tons	t=s	3	
Trichlorethylphosphate	tons	t=s	2	

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Plastic department

Igelit - P. C. U.	tons	t s	4,395 849	5,700 2,400
Igelit - P. C.	tons	t s	999 825	1,440 1,255
Vinidur foil				2,050
Vinidur tube and rod				590
Vinidur welding rods	tons	t s	2,913 1,576	660 480
Vinidur plates, blocks, etc.				30 29
Igelit sheet				60
Igelit sheet printed				2,000
Igelit soles rolled				776
Igelit injection and press material	tons	t s	4,132 2,584	360 360
Igelit gasket material				600
Igelit hose, etc.				600
Igelit floor and furniture covering	m ³ x10 ³	t s	1,059 1,047	1,200 1,200
Igelit tablecloths, printed	items	t s	1,577 1,576	120 119
Igelit tablecloths, embossed	items	t=s	423	255 254

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Product	Quantity	Total=t Sold=s	Actual-1952	Planned-1953
Igelit adhesive solution	tons	t s	383 367	420 390
Igelit stock solution for paint	tons	t s	921 820	800 800
Igelit pastes	tons	t s	5,241 3,519	4,800 3,000
Igelit soles, pre-set				390
Igelit soles, injected				660
Igelit soles and heels		t s	1,256 1,222	540 300
Special products				50
Igelit boots	1000 pr.	t s	397 393	420 420
Igelit shoes	1000 pr.	t s	136 131	84 84
Vinidur fly-press parts				28
Vinidur "Werkstatt" (shop)				128
Vinidur heat fabricated containers	tons	t s	980 946	84
Packing containers				480
Gutters and fall pipes				480
Vinidur aprons	1000	t s	785 778	232 232
Thinners for Vinidur lacquer	tons	t	2	
Igelit waste	tons	t=s	133	
Vinidur waste	tons	t=s	243	
Vinidur granules	tons	t s	10 80	

WERK NORD

Caustic soda lye	tons	t	44,600	44,700
	NaOH	s	29,475	32,626
Caustic soda, solid tech.	NaOH	t s	10,493 6,500	10,800 6,600
Gaseous chlorine	tons	t		38,440
Liquid chlorine	tons	t s	10,140 7,085	10,250 6,750

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<u>Product</u>	<u>Quantity</u>	<u>Total=t</u> <u>Sold=s</u>	<u>Actual-1952</u>	<u>Planned-1953</u>
Hydrogen, uncompressed	m ³ x10 ³	t		11,350
Hydrogen, compressed	m ³ x10 ³	t s	708 574	650 530
Barium carbonate	tons	t s	1,427 964	2,400 1,950
Hormit spray	tons	t s	84 60	180 100
Hormin dust	tons	t=s	265	1,100
Caustic potash, low Cl content	tons	t=s	2,825	2,400
Chloride of lime	tons	t=s	2,787	2,400
Sodium hypochlorite bleaching lye	tons	t s	6,816 6,593	6,600 6,300
Tooth paste	tubesx10 ³	t s	2,022 2,017	3,000 3,000
Siliron and trosilin	tons	t s	28,780 28,656	26,000 25,900
Synthetic precious stones	kilos	t=s	4,027	3,600
Soup flavoring	tons	t=s	483	540
Granulated soup	tons	t=s	178	240
Soup cubes	tons	t=s	206	240
Albumen powder	tons	t s	576 554	500 500
Sauce cubes	tons	t=s	106	106
Cerium spark metal	tons	t=s	1.4	7.2
Calcium-aluminum alloy	tons	t=s	60	36
Bearing metal (from own raw material)	tons	t s	91 84	120 120
Bearing metal (reclaimed)	tons	t=s	318	480
Ferrochromium	tons	t s	379 365	1,200 1,200
Ferromolybdenum	tons	t=s		300
Ferrotitanium	tons	t=s	43	150

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<u>Product</u>	<u>Quantity</u>	<u>Total=t</u> <u>Sold=s</u>	<u>Actual-1952</u>	<u>Planned-1953</u>
Ferrovanadium	tons	t=s		30
Ferrotungsten	tons	t=s	0.1	300
Molybdenum (chemically pure)	tons	t=s	6	6
Tungstic acid	tons	t s	32.6 21	30 30
Sulphuric acid residues	tons	t=s	946	
Alkaline filling materials	tons	t=s	72	
Aluminum-nickel powder	tons	t=s	1.4	
Aluminum oxide	tons	t=s	0.5	
Barium metal	tons	t=s	0.9	
Anhydrous calcium chloride	tons	t=s	12	
Cobalt metal powder	tons	t=s	14	
Cobalt sulphate	tons	t=s	3.2	
Corundum containing material	tons	t=s	1.4	
Magnesium-aluminum alloy	tons	t=s	14	
Mg-Fe-Si-Cu alloy	tons	t=s	0.3	
Magnesium-nickel alloy	tons	t=s	3.9	
Magnesium powder	tons	t=s	2.2	
Magnesium turnings	tons	t=s	0.6	
Magnesium rods	tons	t=s	1.9	
Magnesium cubes	tons	t=s	3.4	
Molybdenum chalk (Molybdaenkalk)	tons	t=s	0.9	
Molybdic anhydride (MoO ₃)	tons	t=s	0.3	
Phosphorus-copper (from recovery)	tons	t=s	5.0	
"Siebkalk" (filtering lime)	tons	t=s	13.0	
Tungsten (chemically pure)	tons	t=s	0.5	
Tungsten (chemically pure) from residues	tons	t=s	18.9	

Light metal department

Foundry aluminum	tons	t s	16,271 9,321	21,500 15,910
Purest aluminum	tons	t s	212 291	185 185
Aluminum powder (Griess)	tons	t s	564 24	1,800 100
Aluminum rivet alloys from scrap	tons	t s	119 38	640 -
Aluminum casting alloys from scrap	tons	t s	5,300 3,529	5,360 4,440
Articles in cast aluminum	tons	t s	7,407 -	4,300 -

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<u>Product</u>	<u>Quantity</u>	<u>Total</u>	<u>Actual-1952</u>	<u>Planned-1953</u>
		<u>Sold</u>		
Extrusion press semi-finished articles in aluminum alloy	tons	t s	5,231 4,383	3,300 2,110
Die-press products in aluminum alloy	tons	t s	87 32	30 30
Aluminum alloy castings	tons	t s	1,748 1,678	1,300 1,300
Raw magnesium	tons	t	-	750
Magnesium alloy from "New" metal	tons	t=s	-	750
Magnesium alloy from scrap	tons	t s	1,289 769	850 775
Castings in Mg alloy	tons	t s	319 309	70 70
Vinidur buckets	tons	t s	276 276	200 200
Welding alloys	tons	t s	194 193	180 180
Steel castings	tons	t s	446 427	350 350
Magnet alloys	tons	t s	107 107	300 300
Aluminothermic manganese	tons	t s	11 6	36 24
Ferromolybdenum	tons	t s	59 58	100 100
Ferrovandium	tons	t s	- -	40 40
Ferrotungsten	tons	t s	118 115	180 180
Dustbins	items	s	2,886	
Bedsteads	1000's	s	37.4	
Bicycle pumps	1000's	s	556	
Ferrochromium	tons	t s	20.1 17.5	
Ferronickel	tons	s	12.3	
Ferrovandium	tons	s	30.4	
Ferrotungsten	tons	s	161	
Ferrotitanium	tons	t s	50 45	
Al-Fe alloy	tons	s	22.7	
Devarda's alloy	tons	s	0.1	
Special iron powder	tons	s	12.2	

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Product	Quantity	Total=t Sold=s	Actual-1952	Planned-1953
P-Cu alloy	tons	s	52	
Iron sulphide	tons	t	0.8	
		s	0.3	
Welding powder	tons	s	1.4	
Joining electrodes	tons	s	34.7	
Light metals electrodes	tons	s	1.0	

Power station

1.	Electric current	KWhx10 ⁶	t	1,470	1,450
			s	372	166
2.	Steam	tons x 10 ³	t	9,534	9,778
			s	523	547

Personnel

On the first of January 1953, the EKB Bitterfeld employed a total of 12,756 persons (9,287 men, 3,469 women). These were divided as follows:

(a) <u>Salaried grades:</u>	Technical staff, Male	854
	Female	31
	Commercial staff, Male	462
	Female	383
Total:		1,285
(b) <u>Others:</u>	Trained labor, Male	8,002
	Female	3,055
	Apprentices Male	532
	Female	342
Total:		11,057

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